

WOOD HOUSEHOLD FURNITURE

A Manufacturing Possibility for Elbert County, Georgia

Prepared for

The Elbert County Redevelopment Corporation

by

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## Summary

Elbert County has both the resources and the location features necessary to make it a good community for the manufacture of wood household furniture.

Major assets are the following:

1. The county has a plentiful and continuing supply of labor that is already familiar with the standards and pay systems of the furniture industry through its experience in an industry relying on similar standards and pay systems. Not only are the granite workers in Elbert County familiar with incentive wage systems, but they also have the appreciation for finish, dimension, line, and care in handling which is requisite in furniture manufacturing.
2. Within Elbert County and contiguous counties there are over one billion board feet of hardwood sawtimber, and Georgia's hardwood growing stock is increasing in volume, thus assuring a continuing supply.
3. Elbert County is located between the High Point Furniture Mart and the Atlanta Merchandise Mart.

These factors are all of importance because the furniture industry is at the point of considerable expansion outside the traditional furniture manufacturing areas. The need for new capacity is great. The industry is growing rapidly and sales of wood household furniture by manufacturers in the U. S. exceed \$2 billion annually. Annual growth is on the order of \$100 million.

Opportunities exist both for branch plants and for newcomers to the industry.

## OUTLOOK FOR THE FURNITURE INDUSTRY

### Over-all Industry Growth

The rapid growth of the furniture industry in recent years has encouraged manufacturers to increase capital spending. This growth is the result of increasing personal consumption expenditures on furniture, which, on a national scale, remain very close to a constant percentage of total personal consumption expenditures. Table 1 shows how small the variation is from year to

Table 1  
TOTAL PERSONAL CONSUMPTION EXPENDITURES  
COMPARED WITH PERSONAL CONSUMPTION EXPENDITURES  
ON FURNITURE IN THE UNITED STATES, 1947-1963

Year	Personal Consumption Expenditures (in millions of dollars)		(B) as a Per Cent of (A)
	Total (A)	On Furniture (B)	
1947	165,409	2,700	1.63
1948	178,313	2,920	1.64
1949	181,158	2,820	1.56
1950	195,013	3,286	1.68
1951	209,805	3,350	1.60
1952	219,774	3,229	1.47
1953	232,649	3,294	1.42
1954	238,025	3,265	1.37
1955	256,940	3,671	1.43
1956	269,917	4,432	1.64
1957	285,164	4,456	1.56
1958	293,198	4,488	1.53
1959	313,538	4,866	1.55
1960	328,232	4,820	1.47
1961	337,347	4,761	1.41
1962	356,754	5,070	1.42
1963	374,959	5,395	1.44

Source: Tze I. Chiang, Wood Dimension Stock: A Manufacturing Opportunity in Georgia, Industrial Development Division, Georgia Institute of Technology, Atlanta, Georgia, March 1965

year.<sup>1/</sup> Since reliable forecasts are available for income for the U. S., it can be calculated that expenditures for furniture should grow more than 50% during the decade between 1960 and 1970.

Consequently, it can be expected that people in the United States will spend almost \$7.5 billion for furniture in 1970. This represents an annual increase in sales of \$258 million. The \$6 billion retail furniture market in 1964 was almost exactly the amount to be expected from the forecast.

#### Demand for Wood Household Furniture

That portion of the industry making wood household furniture shows a picture just as encouraging as that for the over-all industry. Figure 1 shows that although the industry has experienced frequent declines over the years, the bottom of the latest cycle has always been well above the top of the previous cycle. For upholstered furniture it was necessary to show two overlapping curves because the definition of upholstered furniture was changed by the U. S. Bureau of the Census in 1957, eliminating several things that were included in the older statistics. Information is available on both definitions for three years, permitting enough overlap to demonstrate that the growth trend is comparable for the two lines. In 1962, sales of nonupholstered furniture were in excess of \$1.6 billion; sales of upholstered wood household furniture were close to \$1 billion.<sup>2/</sup>

An earlier study by Georgia Tech, based on statistics through 1958, indicated that upholstered furniture was growing at a rate of over \$50 million a year and furniture, not upholstered, was growing at only about \$30 million a year, although it had a sales volume 50% above that of upholstered furniture. Figures since 1958 (a depressed year for business generally) are such as to make the trends for both kinds of wood household furniture comparable -- about \$50 million growth annually for each.

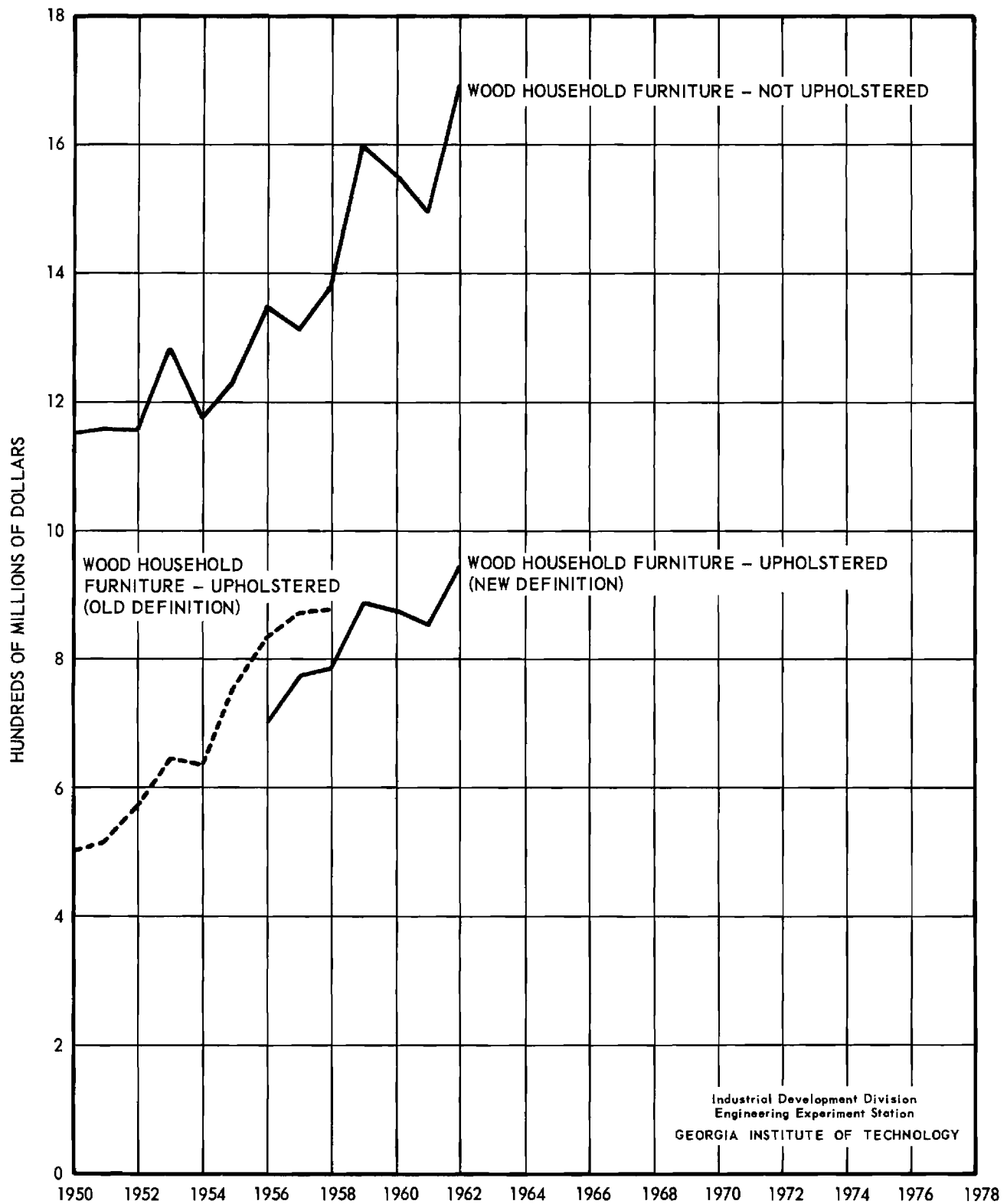
It actually makes little difference, however, whether the long-term growth is closer to \$30 million a year or \$50 million. Either demonstrates the possibility of adding dozens of new factories each year.

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<sup>1/</sup> Although the trend actually shows a slight decline over the years, it is not great enough to be significant.

<sup>2/</sup> Manufacturers' prices to the retailer.

FIGURE 1  
VALUE OF SHIPMENTS - WOOD HOUSEHOLD FURNITURE AT MANUFACTURERS' PRICES



Growth of the sales of different kinds of wood household furniture is shown in Table 2.

Table 2  
FIVE-YEAR GROWTH OF SELECTED ITEMS  
IN THE WOOD HOUSEHOLD FURNITURE INDUSTRY  
(in thousands of dollars)

	<u>1962</u>	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>
Radio, phonograph, and television wood cabinets	121,764	107,997	106,796	120,371	114,011
Other wood living room, library, sunroom and hall furniture	300,076	265,297	266,627	259,278	222,448
Wood dining room and kitchen furniture (except cabinets)	220,901	189,310	204,061	200,138	166,632
Wood kitchen cabinets	245,239	212,644	198,720	211,161	189,971
Wood bedroom furniture	563,811	497,542	511,637	533,331	457,215
Infants' and children's wood furniture	50,357	50,505	49,967	51,027	46,889
Wood outdoor furniture and unpainted wood furniture	66,519	57,917	55,498	55,567	52,908
Upholstered wood household furniture	817,176	739,268	751,278	770,145	684,751
Furniture frames for household furniture	78,115	62,825	55,185	50,538	36,477

Source: U. S. Bureau of the Census, Annual Survey of Manufactures

#### The Need for Expanded Production Capacity

The rapid growth in demand for wood household furniture has generated a need for much greater manufacturing capacity. Until very recently this extra capacity has been met by new investment and increased efficiency in already existing plants.

There is, however, a limit to the capacity and production that can be obtained in a particular place. Eventually, one must move if only to find more work space, more raw material, or additional labor. The North Carolina furniture companies now are finding themselves forced to look to other locations in order to expand sufficiently to meet the demand for their products.

The fact that these companies were able to increase prices twice during 1964 is an indication of the extent of this demand. Further expansion in their present locations is limited by a labor shortage; competition for available labor has become so intense that many firms find it necessary to resort to luring workers away from competing plants.

Some of the North Carolina manufacturers have been looking for companies to buy -- seeking in this way to bring their own production up with demand. This is no real solution, however, because it does not increase capacity, and it is new capacity that is needed, not reshuffling of current capacity.

Therefore, many of the leading North Carolina manufacturers have come to the conclusion that new plants -- many new plants -- are required quickly. In order to assure themselves of adequate sources of both labor and raw materials, they are interested in establishing manufacturing sites outside the state. Georgia appears to be a good location, and several companies have already expressed an interest in locating branch plants in the state. South Carolina, however, is also receiving a great deal of attention.

The urgent need for expansion is not limited to North Carolina manufacturers, however. If this were not a nationwide problem, companies in other parts of the country would be filling the vacuum. The fact that the demand in North Carolina is so great shows that the vacuum is not being filled. Therefore, all progressive furniture manufacturers in the U. S. are prospects for new plants.



## LOCATION FACTORS FOR THE WOOD HOUSEHOLD FURNITURE INDUSTRY

Historically, the factors that have been important in deciding upon the location of furniture plants have been hardwood timber resources and labor supply. These same factors, plus the availability of display space, have influenced the expansion of original locations into furniture-making complexes.

### Sawtimber

A plant may not necessarily be raw material-oriented, but it is obvious that cost savings can be effected by proximity to raw materials. The major raw material used is, of course, hardwood. Although furniture manufacturers in North Carolina are purchasing wood from as far away as New York and Louisiana (7% of their requirements come from Louisiana), North Carolina itself still supplies more than 40% of their needs. These manufacturers, therefore, are accustomed to having wood supplies near at hand, and any expansions probably will be made in areas where hardwood timber is nearby.

### Labor

The shortage of furniture workers in North Carolina, as indicated in the previous chapter, is one of the reasons that the state's furniture industry is contemplating expanding its operations into other states. Very likely this is one reason that some of the manufacturers are looking for companies to buy; in buying, they obtain an already trained work force. As pointed out earlier, however, the industry needs additional capacity, and finding trained labor for new plants is unlikely. It is possible, though, that the industry will be very much impressed with a locality that has labor available with skills similar to those in the furniture industry.

### Display Space

Just as furniture can be made far from the source of timber supply, it can be made far from a place to display the designs. While many furniture companies do not display their furniture designs at furniture shows, most of them do, and proximity to a furniture mart is very much like being market-oriented. Much of Chicago's furniture industry, for example, is oriented to the Chicago Furniture Show. A good furniture show is an asset to the furniture industry and thus would be an important factor in determining the location of a new plant.

## ADVANTAGES OF AN ELBERT COUNTY LOCATION

Elbert County has a number of advantages that make it well worth considering as a location for furniture manufacturers. Both labor and raw materials are at hand; both currently are problems in North Carolina.

### Labor Force and Wage Structure

As has been pointed out elsewhere, Elbert County has a substantial labor force available for manufacturing.<sup>1/</sup> In addition, since the granite industry (the county's major industry) is being forced to mechanize, there will be a continuing flow of men released to the labor force as mechanization progresses. In fact, it has been indicated that the granite industry is not mechanizing as rapidly as it might because there are no plants to absorb the labor.

Although most areas of the country report substantial quantities of semi-skilled workers, they are usually semiskilled in crafts or industries that are of little value to a specific employer. The granite workers, however, already have an appreciation for finish, dimension, line, and care in handling -- qualities in high demand by furniture manufacturers.

Furthermore, the wage structure in Elbert County is comparable to that of the more progressive furniture companies.

Wage rates and fringe-benefit costs for furniture manufacturers in Elbert County are likely to be similar to those shown in Tables 3 and 4, which are based on a survey conducted in late 1964 and early 1965. Wage rates presented in Table 3 do not, however, reflect total wages that might be paid by companies using an incentive system, a point which will be discussed in detail in succeeding paragraphs.

The furniture labor-cost survey was designed to approximate the conditions under which a new plant might be established. Detailed information was sought from six companies of medium size (from 100 to 400 employees) located in small communities (population from 2,500 to 35,000). Five companies with a total of 1,250 employees responded in time to be included in the results.

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<sup>1/</sup> Robert B. Cassell and Roger K. Sund, Elbert County: An Economic Analysis, Industrial Development Division, Georgia Institute of Technology, Atlanta, Georgia, March 1963.

Table 3  
RANGE OF WAGES PAID BY FIVE FURNITURE MANUFACTURERS IN GEORGIA  
(dollars per hour)

<u>Job Title</u>	<u>Average Rate</u>	<u>Average Starting Rate</u>	<u>Average Top Rate</u>	<u>Range of Top Rates</u>
1. Saw Operator, trim	1.42	1.33	1.46	1.39-1.53
2. Saw Operator, other (cut-off band, straight-line rip)	1.40	1.26	1.44	1.35-1.50
3. Planer, rough or finish	1.36	1.28	1.43	1.39-1.45
4. Glue Clamp Operator	1.31	1.26	1.38	1.28-1.45
5. Router, Shaper, or Boring Machine Operator	1.41	1.29	1.50	1.39-1.65
6. Molder, Dado or Lathe Operator	1.49	1.31	1.52	1.34-1.61
7. Sander, belt	1.38	1.26	1.44	1.36-1.50
8. Pre-assembler	1.38	1.26	1.41	1.35-1.55
9. Frame Builder	1.45	1.27	1.49	1.40-1.67
10. Sprayer	1.52	1.28	1.54	1.47-1.60
11. Hand Rubber	1.32	1.26	1.33	1.29-1.35
12. Finish Worker, other (sander, patchman, stain wiper, wash-off, repair)	1.30	1.26	1.42	1.35-1.60
13. Pad Installer	1.33	1.26	1.34	1.31-1.36
14. Fabric Cutter	1.44	1.28	1.46	1.35-1.56
15. Sewing Machine Operator	1.47	1.27	1.48	1.39-1.57
16. Zipper Machine Operator	1.47	1.27	1.47	1.36-1.57
17. General Upholsterer	1.55	1.35	1.58	1.51-1.68
18. Inspector, Wood Products	1.52	1.28	1.56	1.46-1.63
19. Inspector, Upholstered Products	1.57	1.30	1.60	1.55-1.63
20. Shipping Personnel (loader, puller, packer)	1.40	1.25	1.41	1.34-1.45
21. Janitor	1.30	1.25	1.32	1.27-1.37
22. Maintenance Man	1.58	1.29	1.61	1.53-1.80
23. Clerk (shipping, receiving, stock)	1.37	1.25	1.39	1.33-1.55

The survey shows a wage-rate structure which is well below the national average and below the wage-rate structures of major furniture manufacturing states in the Southeast. But it also shows a broad range of pay for each job title. Similar conclusions can be drawn for fringe-benefit costs.

The broad range of wages turned up by the survey is due primarily to the fact that two companies pay incentive wages on top of base rates while the other three pay only straight, nonincentive wages. The result is that some companies are paying total wages which are from 6% to 89% higher than those paid by other companies for the same job title.

This broad range of wages does not show up in Table 3, however, because the table is derived from only the base rates paid by companies with incentive plans and the total wages of companies without incentive plans. Incentive rates are applied to 15 of the job titles listed in Table 3 -- numbers 1 through 10 and 13 through 17. None of the companies applies incentive rates to the other eight job titles.

When incentive rates are applied to the 15 job titles, rates for these 15 jobs range from 100% to 189% of the base rate and average 141% of the base rate. The highest base rate used for incentive application is at the lower end of the top rates shown in Table 3 one third of the time, at the upper end of the range one third of the time, and within the range one third of the time.

Top rates shown for incentive jobs in Table 3 are from \$1.36 for a pad installer to \$1.68 for a general upholsterer. With the application of incentive pay, the top wages would range from \$1.67 to \$3.18. Although there is no logical method for applying the incentive information derived from the survey to the average hourly rate shown in the first column, companies which anticipate operating plants with incentive systems can roughly estimate the wages they likely will pay by adding 40% to the rates shown.

Both the incentive-paying and the nonincentive-paying companies in the survey are convinced that their method is preferable. The straight-wage companies do not believe the additional administrative costs required by an incentive system would be offset by lower unit production costs. It is worth noting that no objections were made to the actual incentive payments -- the objections were to higher overhead. The incentive-paying companies claim that the higher wages and costs are more than compensated for by higher productivity.

The manager of one incentive-paying plant in Georgia which is owned by a national company has only praise for his workers in spite of the relatively high wages he is paying. He claims that productivity at his plant presently is higher than at any of the company's other plants, which are located in the Northeast, the Midwest, and the Far West, and that his plant has always been among the top in productivity. Since the company pays exactly the same incentive rate and nearly the same base rate at all of its plants, the high productivity of the Georgia plant cannot be attributed to the wage structure. He also claims that his plant has always produced the best-quality furniture -- fewer pieces have been returned to his factory for reworking.

In Elbert County the granite industry is operating on both systems at present. Therefore, it should not be a difficult matter for furniture companies using either straight pay or incentive wages to quickly adapt their own pay systems to Elbert County conditions. Since the incentive system is already accepted in the community, there would be no problems involved in gaining acceptance from employees or other industry.

Fringe benefits of the companies participating in the survey also cover a broad range. They are shown in Table 4.

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Table 4  
FRINGE BENEFITS OF SELECTED COMPANIES  
IN THE GEORGIA FURNITURE INDUSTRY

Paid Holidays:	0 to 7
Shift Differential:	Only one company uses a second shift. It pays a 5¢ per hour shift differential.
Vacation:	One week after one year -- 5 companies Two weeks after five years -- 3 companies Three weeks after 15 years -- 2 companies
Insurance and Hospital Options:	All companies have hospital, surgical, and life insurance coverage. Two of those supplying information pay half the cost and two pay all the cost.
Pensions:	Two companies contribute to employee retirement programs.
Total Fringe Benefits:	Total costs ranging from 16¢ to 43¢ per hour were reported.

### Availability of Hardwood Sawtimber

As has already been pointed out, although wood sometimes is shipped long distances to furniture plants, it is a great asset to have wood in the vicinity of the plant. Nearby raw material means that delivered cost to the furniture plant is kept low. This can be true even though purchases are made outside the local area. In such cases the purchases are made because the distant lumber dealers absorb enough of the freight costs to compete with nearby suppliers.

Elbert County is most fortunate in terms of hardwood sawtimber supply. Table 5 and Map 1 show that in Elbert County and those counties directly adjoining there are over one billion board feet of hardwood sawtimber.

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Table 5  
VOLUME OF HARDWOOD SAWTIMBER  
IN ELBERT COUNTY AND ADJOINING COUNTIES  
(in millions of board feet)

<u>County</u>	<u>Sawtimber Volume</u>
Elbert	102.8
Hart	35.0
Madison	148.3
Oglethorpe	164.4
Wilkes	188.0
Lincoln	37.7
McCormick (S. C.)	98.4
Abbeville (S. C.)	166.4
Anderson (S. C.)	<u>171.1</u>
	1,112.1

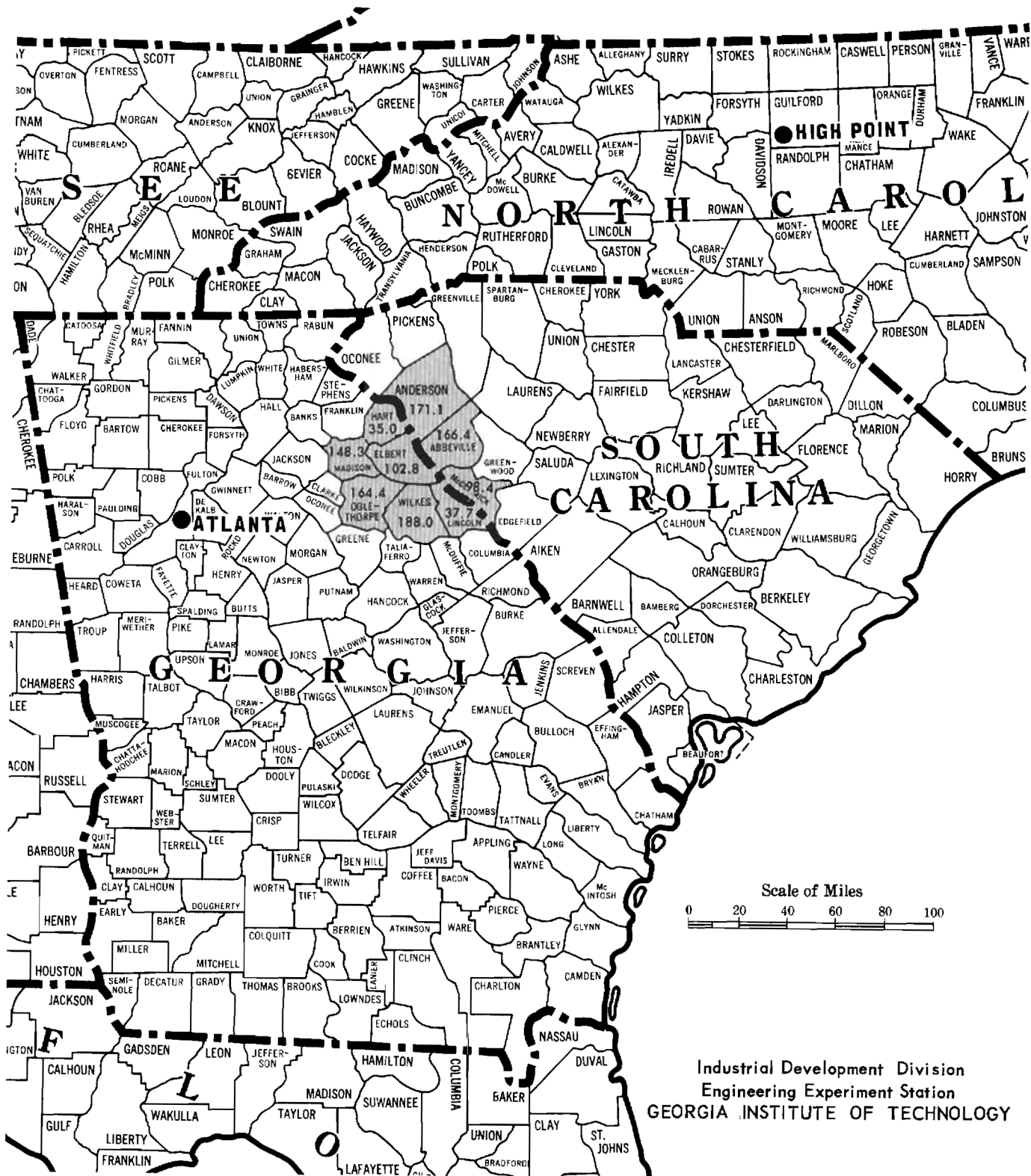
Source: Georgia's Timber, 1963, and South Carolina's Timber, 1960, U. S. Forest Service, Southeastern Forest Experiment Station, Asheville, North Carolina

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Furthermore, Georgia's hardwood growing stock is expected to increase in volume by 30% in the next 25 years.

Elbert County should, therefore, have a plentiful supply of hardwood near at hand. Even if an Elberton manufacturer should depend on dimension stock

MAP 1  
VOLUME OF HARDWOOD SAWTIMBER IN ELBERT COUNTY AND ADJOINING COUNTIES  
(in millions of board feet)



suppliers for parts, some of the work must be done in the plant, and nearby sources of the basic raw material would permit a manufacturer to make his own dimension stock eventually, when growth warranted such a move.

#### Furniture Display Facilities

A characteristic of large furniture manufacturing areas is the existence of sizable furniture marts in the vicinity. Thus, large furniture marts are found in High Point, Chicago, and Dallas to serve the needs of manufacturers in these areas. The marts serve an important function in bringing buyers and sellers together and in displaying at a central point the complete lines of many different furniture producers.

Elbert County is located so as to be able to take advantage of both the High Point Furniture Mart and the Atlanta Merchandise Mart. (See Map 1.) Although Elberton is not directly between the two marts, it is in reasonable proximity to each.

The largest furniture display facilities in Georgia are found in Atlanta at the Atlanta Merchandise Mart. The mart is a 23-story, \$15 million structure which provides a million square feet of floor space for lease to furniture manufacturers and other wholesale firms. Home furnishings, including furniture, occupy about 10 floors of the building. These floors contain almost 200 show-rooms representing almost every major line of home furnishings in the nation.

Construction of additional display space adjoining the present mart is scheduled to begin shortly.



## PROSPECTS FOR A NEW ENTRANT INTO THE FURNITURE INDUSTRY

Prospects for new entrants into the furniture industry are good. Although there are a number of large, well-known companies in the industry, the sales volume of the largest is only 1% of that of the industry as a whole. Brand names can be influential but never are overriding considerations with furniture retailers. Large retailers are very likely to have furniture made under their own brand names.

In fact, furniture manufacturing is dominated by small plants; two thirds of the plants employ less than 20 persons. On the other hand, between 1958 and 1963, 119 new plants employing more than 20 employees were added in the U. S. without creating overcapacity -- actually without adding nearly enough.

A new manufacturer might want to give some thought to the manufacture of oak furniture. Although this wood had been out of style for a long time, strong promotion has been making oak a popular wood again; a newcomer might be able to take advantage of the renewed interest.

The ideal time for a new company to start is right now, since the major companies will in all probability expand this year. Although new companies enter the furniture industry all the time, the best time is when demand exceeds supply.

A new company, however, should be established only with the assistance of experienced people. Furniture consultants and designers are available to get a new company started in the right direction. The recent trend toward the purchase of furniture parts (dimension stock) by the furniture manufacturer reduces investment requirements by eliminating the need for much equipment. It also permits a reduced scale of operation without a corresponding reduction in efficiency. The manufacture of parts requires an operating level sufficiently high to pay for the machinery; assembly of parts into furniture does not require as high a level.

## CONCLUSION

Although wood household furniture plants can operate almost anywhere, certain factors make some locations more profitable than others. Elbert County possesses three prime advantages -- a good supply of labor trained in skills parallel to those required in furniture manufacturing, an abundant and growing supply of hardwood sawtimber, and a location between two large furniture marts.